

## **Louisiana Department of Environmental Quality**

### **Mississippi and Atchafalaya River Water Quality Monitoring Activities**

**November 2008**

The Louisiana Department of Environmental Quality has conducted environmental monitoring of the Mississippi and Atchafalaya Rivers for over 40 years. The Louisiana reach of the Mississippi River is 504 miles long and courses through 17 Louisiana parishes from the Arkansas line to the Gulf of Mexico. In addition, Louisiana shares approximately 200 miles of river with the state of Mississippi. The west bank of the river from the Arkansas border at mile 504 to Venice, Louisiana near Head of Passes at mile 18.6 is leveed and has no tributary input. However, a percentage of the river's flow is diverted into the Atchafalaya River near river mile 300 and a smaller percentage is diverted into Bayou Lafourche near river mile 175. The east bank of the river is also leveed on the Louisiana side but does receive some minor tributary input. River diversions on both sides of the Mississippi River in Louisiana have been implemented in recent years as part of the state's coastal restoration program. Presently the Mississippi River in Louisiana receives approximately 300 permitted industrial and municipal discharges. The river also has several drinking water treatment plants that serve approximately 1.5 million Louisiana consumers.

Louisiana has operated seven monthly water quality monitoring stations on the Mississippi River over the years ranging from Lake Providence near the Arkansas border at river mile 484 to Pointe A La Hache south of New Orleans at river mile 49. Presently active stations are at St. Francisville (42 years), Plaquemine (42 years) and Belle Chasse (42 years). Two stations have been monitored on the Atchafalaya River. All samples are collected according to appropriate quality assurance/quality control procedures and transported to the Department Laboratory for analysis. Bacteria samples are delivered to the state Department of Health and Hospitals laboratories for analysis. The monthly monitoring program provides data for Clean Water Act river water quality assessments. The following are descriptions of monthly river monitoring stations;

#### **Mississippi River**

1. Lake Providence, East Carroll Parish, River Mile 484: 1983 – 1998
2. St. Francisville, West Feliciana Parish, River Mile 266: 1966 – Present
3. Plaquemine, Iberville Parish, River Mile 208: 1966- Present
4. Litcher, St. James Parish, River Mile 147; 1966 – 1995
5. Luling, St. Charles Parish: 1966 - 2001
6. Belle Chasse, Plaquemines Parish, River Mile 76: 1966 – Present
7. Pointe A La Hache, Plaquemines Parish, River Mile 49: 1971 – 1998

#### **Atchafalaya River**

1. Krotz Springs, St. Landry Parish: 1963 – 1998
2. Morgan City, St. Mary Parish: 1978 – Present

Twenty five conventional water quality parameters are monitored for monthly at each active station and historical records are available for the same parameters at discontinued stations. In addition, over 50 volatile and semivolatile organic compounds, pesticides and PCB's are monitored quarterly at two stations and historical monthly data is available for some stations.